STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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Dirk Kempthorne, Governor
C. Stephen Allred, Director

April 14, 2004

Ms. Kathleen Hain, Team Leader
Environmental Restoration Program
U.S. Department of Energy
Idaho Operations Office
1955 Fremont Avenue
Idaho Falls, Idaho 83401-1216

IDEQ Technical Review Comments for the **Remedial Action Report for the Idaho National Engineering and Environmental Laboratory, Central Facilities Area, CFA-04 Pond Mercury Contaminated Soils Operable Unit 4-13 (Draft)**

Dear Ms. Hain:

The Idaho Department of Environmental Quality (DEQ) has completed its review of the above-referenced document, and provides the enclosed comments. DEQ received the document on March 1, 2004. Comments were sent electronically on April 14, 2004.

If you have any questions regarding these comments, please contact me at (208) 373-0556.

Sincerely,

Clyde Cody
INEEL WAG 4 Manager
IDEQ Technical Services Group

CC/jc

cc: Carol Hathaway, USDOE-ID
Kathy Ivy, USEPA
Daryl Koch, DEQ-WMRD

Enclosure

IDEQ Technical Review Comments for the **Remedial Action Report for the Idaho National Engineering and Environmental Laboratory, Central Facilities Area, CFA-04 Pond Mercury Contaminated Soils Operable Unit 4-13 (Draft)**
April 14, 2004

General Comment

Overall, this is a very complete and comprehensive Remedial Action Report. It appears to include all the necessary information as required under the FFA/CO Action Plan, pages 22-23.

Specific Comments

1. **Figure 2, page 5**

   The title of the figure is the "The Central Facilities Area-04 Pond". However, the pond location is barely discernible on the figure. Please include a figure that better provides CFA-04 Pond details.

2. **Section 2.3.2, last paragraph, page 11**

   The statistical analysis referred to here is in Appendix E, not F.

3. **Section 7.1, last paragraph, page 15**

   The work plan cited, the "WAG 4 RD/RA Work Plan (DOE-ID 2001)", is for the Transformer Yard (CFA-10), not the mercury pond. The correct reference is the WAG 4 RD/RA Work Plan (DOE-ID, 2003b) listed in the references on page 17.

4. **Section 9, pages 16-17**

   The references should include the "Re-evaluation of the Final Remediation Goals for Mercury at the CFA-04 (CFA-674 Pond)", October 2002. This document provided the technical basis for the May 2003 "Explanation of Significant Differences for the Record of Decision for the Central Facilities Area Operable Unit 4-13", which is included in the list of references. The "re-evaluation" is integral to, and provides the basis for, understanding the changes to the original ROD clean-up goal at this site.

5. **Figure C-2, Appendix C, page C-7**

   Comment is the same as Specific Comment 1 The CFA-04 Pond is not readily evident on this figure.

6. **Section C-5.2, second paragraph, page C-22**

   a) Please explain how the percentages for the "poor agreement" between the field sample used for laboratory quality control analysis and its laboratory-generated duplicate (52.2% relative percent difference), and the disagreement

between the matrix spike sample and the matrix spike duplicate sample (46.3% relative percent difference) were derived.

b) Also, the relative percent difference of 5.7% agreement for sample 4R400501HG and its field duplicate, 4R400502HG could not be duplicated. Please explain how this number was derived.

c) Please explain what is meant by the statement, "If the laboratory had performed its QC analysis on one or the other samples, the outcome of the validation qualification could have been quite different (Thompson 2004)." Is this an attempt to justify a poor agreement between field and lab analytical results for 4R400101HG (a relative percent difference was not provided for the QC sample)? Another sample could provide different results, but it is not guaranteed that these results would be "quite different", a phrase which in itself is meaningless in a quantifiable sense.

7. **Section C-5.3, first paragraph, page C-23**

The reference to "negative values" (fourth sentence) is not clear. Please explain how negative values are obtained.

8. **Appendix E, Table E-1, page E-4**

A footnote explaining that the density of the soil is assumed to be 1.5 gm/cm^3 would be helpful. Please add this to the table.